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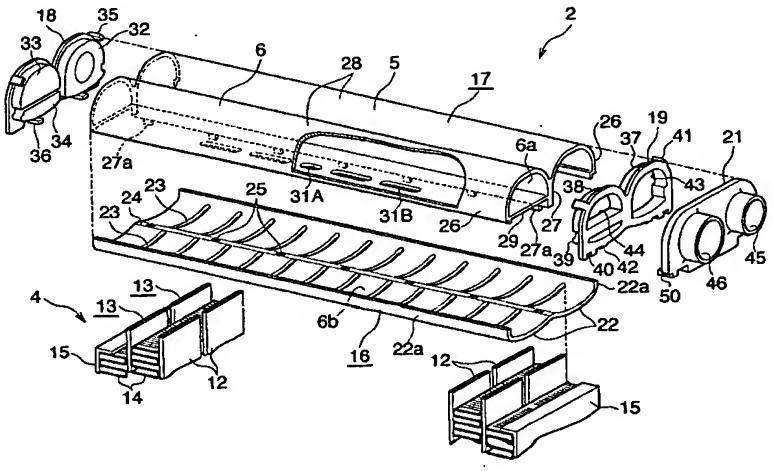

(57) Abstract: A refrigerant inlet-outlet tank 2 disposed on the upper side of a heat exchange core 4 has its interior divided into a front and a rear portion to provide a refrigerant inlet header 5 and a refrigerant outlet header 6. Openings at one end of the tank 2 are closed with a closing member 19 which comprises a front cap 19a having a refrigerant inlet 43 in communication with the inlet header 5, and a rear cap 19b having a refrigerant outlet 44 in communication with the outlet header 6. The two caps 19a, 19b have brazed thereto a pipe joint member 21 positioned transversely of the inlet and outlet headers 5, 6 and having a refrigerant inlet portion 45 in communication with the inlet 43 and a refrigerant outlet portion 46 in communication with the outlet 44. A refrigerant inlet pipe 7 has a constricted end portion 7a inserted in and brazed to the inlet portion 45, and a refrigerant outlet pipe 8 is inserted in and brazed to the outlet portion 46. The evaporator 1 can be fabricated relatively easily, and short-circuiting between the inlet header 5 and the outlet header 6 can be prevented.

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